Presentation to Cal/PERS Symposium
March 15, 2006

I. Appreciation:
   a. Thanks Cal/PERS, JBoss, Tim Garza, Steve Williamson.
   b. Three things to cover:
      i. A short anecdote that serves to distinguish open source from the commercial software development model.
      ii. A few words to summarize ARB's experiences with Open Source applications.
      iii. And a few words to highlight what I perceive as the state's direction with regards to open source solutions.

II. Anecdote:
   a. In 1976, a year or so after starting Microsoft, Gates released a newsletter that condemned the wanton piracy of his BASIC programming language that he and Paul Allen wrote. The BASIC program was their intellectual property; and they wanted to be paid for it. He asked, "who can do professional work for nothing? What hobbyist can put 3-man years into programming, finding all bugs, documenting his product and distribute for free?"

b. His answer came in 1991, when Linus Torvald's, a young Swede living in Denmark, sent out an email over the Internet to a worldwide network of geeks asking them how he could improve his new operating system. He sought collaboration. At that moment, the software development model changed: it was no longer about just one programmer trying to find all the bugs. The model called for a 1,000 eyes of collaborators to refine and perfect a software product that could be shared by everyone.
c. Of course, Linux was a product of the Internet. It proved you no longer had to hire programmers, put them in building to develop shrink-wrapped software, to be distributed through retail stores. The programmers could collaborate from anywhere, packaging became servers someplace, and distribution was distilled to simple downloads available nearly anywhere in the world.

III. ARB Experiences
a. And at the ARB, we've found that the results of the collaborative model have reduced our IT costs, improved productivity as well as increase the reliability of the systems we've developed.

b. At this time, 64% of our 80 systems run on the Linux; 64% of our databases are built using mysql or other OS product.
c. But our relationship with the open source community didn't happen overnight. We grew up with the Internet, with Torvalds' starting back in 1994. Before that we were part of ARPANET; it was our means of communicating and yes, working collaboratively with universities on air quality research. Many of you may remember ARPANET as the predecessor to the Internet.
d. The point is, moving into Open Source has been evolutionary, not revolutionary. It rarely happens overnight. Most generally, it happens one application at a time.

e. If I were to advise you on how to start employing open source, I'd start with the advice from Steve Clemons', leader of the state's enterprise architecture project: first, develop your enterprise architecture. Then I would suggest you look for those spaces where open source options might work: replacing legacy systems or building new ones.

f. The great thing about open source is that it costs very little to try, to prototype, to move

forward with. You don't need to really bother your budget shop.

g. Typically, you just need a server; you can download the software or purchase it for very little. Run a few prototypes. Eventually, you'll discover what the e-trade magazines have been saying: OS works.
h. You'll find that with Linux or JBoss, mysql, PHP, Perl, Apache, that you can forget about expensive software licenses.
i. You'll find that with open source licenses in general, you'll choose when to upgrade your hardware or software. You'll control your systems; not a commercial vendor.
j. These findings have resonated with my office for years. And still do. Our goal is to eventually become 100% open source.

IV. State Directions
a. And in many respects the State CIO, Clark Kelso, seems to like what we're doing at the ARB.
b. He asked me to lead his Open Source Working Group, a group comprised of 11 state IT professionals, from DGS, SOS, DOF, Social Services, DOJ, ARB, Parks, even the Governor's Office.
c. One purpose of the Working Group is to examine open source solutions and evaluate

them in terms of their usefulness: do they represent a good or even best value.

d. Another purpose is to educate ourselves as well as the state's IT community on open source. The more we know, the better our decisions will be. From ARB's experience, we recognize that open source solutions do have value and are fast becoming a competitive player in the IT marketplace. If OS solutions lower IT costs and enhance system performance and reliability, then the state should take advantage of them.
e. Yet another purpose is to inspire collaboration among IT professionals. Symposiums such as this one sponsored by Cal/Pers is just one example. The difference between a symposium like this and one sponsored by a commercial vendor is that, at the end of the presentations you can begin testing the offered solutions almost immediately, at virtually no cost.
f. Other collaboration opportunities may evolve where IT organizations, like ARB's, develop solutions in OS and find ways to distribute it to others, free. Like a State of California SourceForge. If you download the code, you could tweak it to fit your business needs. If you don't, you can throw it away at no cost. But if it works for you, then think of the time and money you saved!

g. The WorkGroup plans to sponsor several forums this year. Watch for announcements for late Spring and Fall.

h. Bottomline: if OS offers opportunities to lower state IT costs, without sacrificing performance, sustainability, security, etc., then the state wants to take advantage of it.
i. To paraphrase SO#10 of the Governor's 2004 CPR, it's OK to use open source. It's certainly worth a try.